## IDENTIFICATION OF APPLICABLE ELIGIBILITY CRITERIA

## A. Eligibility Criteria for Forest Legacy Areas

To be eligible as a Michigan Forest Legacy Area, an area's forestland must meet all of the following criteria:

- Be an environmentally important forest area that is threatened by present or future conversion to nonforest uses;
- Be threatened with conversion by encroaching development or be subject to subdivision into small non-contiguous forest tracts, separated by non-forest land:
- Possess two or more of the following important public values:
  - Scenic resources and public recreation opportunities, recognized by proximity to a national trail, major fall color tour, or one of the Great Lake shorelines.
  - Wetlands, riparian areas, floodplains and/or areas of predominantly high groundwater recharge potential.
  - Fish and wildlife habitat, as determined through an agency or organization ecoregional conservation planning document.
  - o Habitat for known rare, threatened and endangered species.
  - Known historic, cultural and archeological resources, such as Native American burial sites and areas with artifacts related to early European settlements.
  - Other ecological values. Examples include areas of dense globally imperiled natural communities or species, coastal dune area or Niagara Escarpment based communities.
  - Provide for opportunities for continuation of traditional forests uses and benefits including: 1) forest management, 2) timber harvesting, 3) outdoor recreation such as hiking, hunting and fishing, 4) protection of watersheds and high quality cold water habitat and 5) continued economic stability and development of Michigan's rural areas via the forest products and tourism industries.
  - Large blocks of contiguous forest land.
  - Rivers, streams or lakes recognized as important to the State of Michigan.
  - Public access for recreational opportunities.

## B. Process for Identification of Forest Legacy Areas (FLA)

Information on the above criteria was compiled in a GIS, and areas that met each criterion were overlain to produce a map of potential FLA's.

The above criteria were assessed as follows. Areas of scenic or aesthetic importance were identified through information made available by the Michigan

Office of Tourism and a map of surficial geology. Color tour routes and the North Country Trail were each buffered by 0.5 miles, and the Great Lakes shorelines were buffered by 5 miles in ArcView.

Areas of dense concentrations of G1-G3 animals and plants were identified through analysis of the spatial Heritage data made available by the Michigan Natural Features Inventory (MNFI 2002). ArcView GIS was used to generate a density layer, which was classified into nine categories of density. Lands in the top five categories (density greater than 0.67) were included as potential FLA's. A similar process was implemented for G1-G3 natural communities; the top four of the nine categories (density greater than 0.33) were included. Areas that have high potential as wolf habitat (Mladenoff et al., 1995) were used as a surrogate for wide-ranging species and were added to the set of potential FLA's.

Ecoregionally significant conservation areas, as identified by The Nature Conservancy and its partners through ecoregional conservation planning, were included in the set of potential FLA's. These areas include the significant bird areas, as well as areas identified for many other natural communities and species, including aquatic systems. In the Lower Peninsula, recharge potential is strongly related to surficial geology, and the Regional Landscape Ecosystems (Albert 1995), being delineated in large part by geomorphologic boundaries, serve well as units of high or low recharge potential. The Lower Peninsula Regional Landscape Ecosystems that are predominantly of positive recharge potential were added to the potential FLA set. There is no corresponding data set for the Upper Peninsula.

Timber production was included by summing the outputs of two types of products: sawlogs and pulpwood. Sawlog production for all species was summed for the nine years for which data were available for the period 1969 – 1994. ArcView was then used to classify counties into six groups, and counties in the top three groups (with total output of sawlogs in excess of 47,650 MMBF) were added to the FLA set. Pulpwood production for all species was summed for the period 1970 – 1996, and of the six categories of output, counties in the top three (with total output of pulpwood in excess of 315,233 cords) were added to the potential FLA's. Economic dependency was assessed using data that apply to all wildland resources and include recreational activity. These data are a good surrogate for economic benefits derived from forests, especially in counties that are mostly forested. Counties with an economic dependency greater than 10 percent were included in the set of potential FLA's.